

CHAPTER 3

Research Design and Methodology

3.0 Introduction

The key aspect in this study is the teachers' perspective. Their opinions, attitudes and practices are the major components in deciding the instrumentation for this study to investigate the reading problems among pupils in special education classes in government schools. To this end, a cross-sectional study was undertaken to investigate the problem. The data was collected at one point in time from a select sample of teachers drawn from a predetermined population.

A methods triangulation research design through a combination of methods was adopted to enhance the validity of the data collected (Fraenkel & Wallen, 1996). Triangulation can be achieved within a qualitative inquiry or by combining qualitative and quantitative methods. For this study, the latter approach was employed whereby a questionnaire comprising both close and open-ended questions was combined with a semi-structured interview.

3.1 Sampling /

The core insight in this study was to investigate the reading problems of pupils from the teacher's perspective. To facilitate this, the subjects chosen for this study were 17 ESL teachers from five government primary schools in the Klang Valley .All the subjects are professional teachers who have undergone formal teacher training in colleges and universities.

3.2 Instrument

The instrument designed for collecting data is a self-constructed questionnaire adapted from Ekwall (1977: 126) and Ellet (1993: 62) in their report on Diagnosis and Remediation in Reading. The questionnaire (see Appendix B) is specially designed to collect data on

- i) general information on the teachers' backgrounds
- ii) the teachers' knowledge of learning disabilities, especially on the theories and methodologies
- iii) the teachers' awareness of reading disabilities among pupils with LD
- iv) the extent to which they apply their knowledge on learning disabilities when teaching these pupils

A questionnaire of 32 items was drawn up to elicit responses from specialised ESL teachers and which were divided into four sections – A, B, C and D. These items were chosen to be as comprehensive as possible to facilitate the easy progress of the

respondents into each of the 4 sections. The response modes chosen for the questionnaire were unstructured response, fill-in response and scaled response. The choice had been made based upon the type of data desired for analysis, flexibility in responding through the open-ended questions and ease of response.

Section A of the questionnaire consists of 6 items, which are aimed at eliciting information about the teachers' personal particulars and their teaching background, as well as their awareness of remedial reading.

Question 1 – 3: To elicit information about the teachers' personal particulars and if they have attended any courses in teaching remedial education.

Question 4 – 6: To elicit information about teachers' awareness of remedial reading.

Section B consists of 12 items. This section is aimed at gathering information on the general aspects of students with learning disabilities and the approaches teachers take in handling them.

Question 7 – 8: To find out the teachers' familiarity with LD approach/methodology and how they acquired the information.

Question 9 – 10: Characteristics of pupils with reading problems and the types of LD in their class.

Question 11 – 14: To find out the various reading problems faced by the pupils and their ability to understand technical terms and interpret figures and drawings from reading text.

Question 15: To find out the appropriateness of the present texts used for the LD readers.

Question 16: To investigate the teachers' knowledge of reading sub-skills in LD.

Question 17: To find out the LD pupils' reaction to difficult tasks.

Question 18: To gauge the reading ability of the LD pupils.

Section C of the questionnaire consists of 10 items that are aimed at gauging the effectiveness of current teaching methodologies in special education classes.

Question 19 : To find out the pupils' response towards reading.

Question 20 : To find out if remedial education is provided for these pupils.

Question 21 – 25: To elicit information on the methods used for teaching pupils in special education classes and what extra support, if any is provided by teachers.

Question 26 – 27: To get feedback from teachers on making remedial reading a core component in the teacher training programme, as well as introducing compulsory diagnostic testing for reading problems at the beginning of every academic year for all pupils.

Question 28: To get feedback from teachers on what they think of special education classes in schools at the present time.

Section D of the questionnaire consists 4 items that explore the problems faced by teachers, and suggestions for improvement.

Question 29 – 30: To gauge if parents of pupils with reading LD should get involved in remedial activities, and to what degree.

Question 31 – 32: The problems faced by the teachers when providing remedial activities for pupils with LDs and suggestions to improve the effectiveness of special education classes.

Prior to this, interviews (see Appendix A) were conducted with 5 school headmasters and coordinators on the reading problems among pupils in special education classes in primary schools. This was done as part of fieldwork to get an understanding of the problems the teachers teaching pupils with LDs face in carrying out their duties.

Subsequent to this interview, a pilot questionnaire (Appendix C) was developed in an attempt to improve the questionnaire and maximise the validity of the data collected.

3.3 Pilot Questionnaire

Piloting the questionnaire was a vital feature of the entire research process. As cited by Nunnan (1992:145), "it is imperative to pilot any questionnaire." The pilot questionnaire was conducted to see whether the items had the desired qualities of measurement and discriminability. It allowed a variety of failings such as poorly worded or ambiguous items to be diagnosed and corrected for the final Questionnaire (see Appendix B). It was also a device to recommend the best layout of the various sections and the spacing of the items.

The pilot questionnaire was administered to 5 ESL teachers with at least 10 years of teaching experience in English in primary schools. Their exposure in the field provided the reliable perspective desired for this study. The teachers completed the questionnaire with the researcher present and in the process any problems that emerged was given due attention. The problems were dealt with on the spot after discussing possible solutions for improvement. The respondents were indeed very supportive in rendering their personal

ideas on this matter to the researcher. Their cooperation allowed a thorough scrutiny of the questionnaire items.

The respondents were informed of the motive in engaging them as subjects for the pilot.

This fact prompted them to supply concrete and informative ideas in amending the items.

Their readiness to offer these ideas was also due to the fact that all of them have the extensive experience in the ESL field. Their cooperation to responding as required by the researcher provided various valuable points of view. In addition, the personal contact with the respondents helped tremendously with the smooth administration of the final questionnaire and their contributions were essential in achieving the objectives of conducting the pilot.

The administration of the pilot questionnaire did serve its objective, as some minor changes had to be made to improve the items. Modifications in rephrasing and spacing of specific items were made but the total number of questions was maintained. Content-related evidence of validity was also obtained during the pilot. The format of the instrument was given due consideration including the clarity of the printing, length, working space and appropriateness of terminology used. Based on all the feedback from the pilot, the final questionnaire was prepared for administration.

3.4 Questionnaire

The questionnaire was subdivided into 4 sections (A, B, C & D) with separate instructions for each section. This division was essential to focus on the areas of study and avoid redundancy and overlapping. Section A (items 1-6) contained questions aimed at eliciting information about the respondents' background, their teaching experience and knowledge of remedial reading for pupils with LDs. Their responses would justify their eligibility to participate as subjects of this study. The data would be meaningful in understanding their responses in the following sections. It is indeed vital to gather information in order to substantiate their credibility as respondents since they were the only group to be involved.

Items in section B (items 5 – 16) were intended to elicit the subjects' opinions regarding the reading problems of pupils with LDs. The research question: "What are the special Educational teachers' attitudes toward students with reading problems?" would be answered from the feedback here. Items 6 to 14 focused on the teachers' perception of students with reading problems in their classrooms.

Section C (items 15 to 24) specifically attended to the existing teaching practices adopted by teachers when faced with problem readers and will answer the research question: "What are the current methods used by these teachers when dealing with reading problems among pupils with learning disabilities?". It is aimed at gathering data related to actual measures used during a lesson. The items directly attempt to elicit information on practices in a special education classroom setting. They are particularly important as some special education teachers have concrete ideas on how to handle LD pupils with

reading problems but are faced with constraints beyond their control. Valuable suggestions from experienced teachers can supply a feasible solution to these problems.

In section D (item 25 to 28) there are 4 items to elicit data to explore the problem faced by teachers' in terms of feasibility, resources, and suggestions for improvement.

3.5 Questionnaire Construction /

Fraenkel & Wallen (1996) stated that there are three basic considerations every researcher needs to think about with regard to the choice of instrument. The first is validity, measuring what is supposed to be measured. The second is reliability or consistency of the results and finally, there is objectivity or the elimination of subjective judgements. Judd et.al. (1991) outlined a step-by-step guide in constructing the questionnaire. With these considerations in mind the researcher constructed the questionnaire as the main instrument.

3.6 Interview

This tool was employed to further clarify issues that were not clearly answered in the questionnaire. Respondents may not have revealed all their attitudes and practices involved despite being assured of confidentiality. In addition, the open-ended items could have been insufficient for some who would have preferred to elaborate their opinions. This restriction will indeed reduce the quality of the data collected. Furthermore, some of the teachers had not answered left some of the open-end items. It could not be concluded

that they lacked relevant information to answer the questions, as the sample was strictly limited to special education experienced teachers with LD pupils. Therefore these findings presented the necessity to conduct interviews with these particular respondents to enhance the quality of the data collected. Subsequently, five special education coordinators from five surveyed schools were interviewed to clarify any details or queries. The follow up interviews were conducted with the coordinators constraints on the time of the teachers who filled up the questionnaires. The interviews were informal but the focus was maintained throughout the sessions. The respondents were cooperative in allowing in depth probing to elicit information.

3.7 Data Collection Procedure

The questionnaires were given to seventeen special education teachers from five primary schools in the Klang Valley. The administration of the questionnaire was carried out personally. A clear and thorough explanation was given on the purpose of the study and on the finer points of responding to the questionnaire. The respondents were informed that they need not write their names on the questionnaire for the purpose of confidentiality and trust. The questionnaires were duly collected two days after being handed out so that the data obtained could be analysed and the findings reported.

3.8 Summary /

This chapter has dealt with the methodology of conducting the research on the target group, namely those teaching English in special education classes in primary schools. The sample comprises 17 special education teachers from five primary schools in the Klang Valley. The instrument employed was a 32-item questionnaire that measured the awareness of LD among teachers in special education classes, the methods used to teach pupils with LD and their effectiveness. The quantification of the data obtained will be analysed in chapter 4.